

# **REPORT OF THE DISCUSSION MEETING HELD ON 12 MAY 1992 TO CONSIDER INVERTEBRATE CONSERVATION IN THE UNITED KINGDOM**

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At the beginning of this meeting a handout entitled "Invertebrate conservation—major discussion points", produced by the author, was provided to each participant to focus on the major issues within this subject; this is reproduced below. A brief introduction was also given to the meeting, explaining the history and role of the Joint Committee for the Conservation of British Invertebrates, by Helen Smith, its Conservation Officer. An introduction to the Wildlife Link organization was provided by Steve Brooks, the JCCBI representative.

Stephen Miles, BENHS representative to JCCBI, then read out a paper reviewing the existing status of invertebrate conservation in the UK, suggesting a change to the status quo, in that a single invertebrate conservation membership organization should be formed. This paper is also reproduced below.

## **INVERTEBRATE CONSERVATION—MAJOR DISCUSSION POINTS**

1. Do you consider that invertebrate conservation is well served by:
  - a. the Joint Committee for the Conservation of British Invertebrates, (JCCBI) which is mainly a national advisory organization for policy and project formulation;
  - b. governmental organizations, e.g. English Nature, and the Scottish and Welsh successors to the former Nature Conservancy Council and the Joint Nature Conservation Committee (custodians of the Invertebrate Site Register);
  - c. the main non-governmental conservation organizations, e.g. the county wildlife trusts, World Wide Fund for Nature, Woodland Trust, the National Trust and Butterfly Conservation;
 particularly as to how the organizations that have reserves, manage them for insect conservation or promote the well-being of the invertebrates within them?
2. Do we need to worry about the retention of invertebrate habitats and their appropriate management? At each of this society's annual exhibitions, exciting new discoveries of species found in new localities are exhibited each year, despite some reported losses. Even species new to Britain are a regular occurrence.
3. How many county trust nature reserves have been specifically set up to safeguard invertebrate habitats? Is it unrealistic to expect any to be set up just for what is perceived to be the narrow field of invertebrates?
4. As well as the JCCBI, which is only a committee, is there a need for a separate organization specifically set up to campaign for the conservation of invertebrate habitats?
5. Or should the existing entomological societies take on this role through the JCCBI? (As in theory they do at present).

or

Should the JCCBI be somehow reconstituted into a national invertebrate conservation trust?

or

Should it be suggested that Butterfly Conservation broaden its role to take on all insects, or even all invertebrates?

6. How does Butterfly Conservation's mainly anti-collecting stance on Lepidoptera fit in with the necessity to collect voucher specimens of nearly all other groups of invertebrate species, as well as many moths?

7. Do we as entomologists promote our subject and educate others in its complexities sufficiently?

8. Does the JCCBI need to advertise itself more to entomologists and to the general nature conservation community?

9. How can invertebrate conservation be funded in the non-governmental organization sector? Clearly there should at least be one general invertebrate conservation organization to which people can make donations or leave legacies.

10. Would invertebrate conservation benefit from having a demonstration reserve where the special management techniques that ensure that a wide variety of habitat niches are continually available could be readily seen by other natural history organizations?

11. Would the Balfour-Browne Club (the water-beetle organization) defend a site containing rare solitary bees and wasps, or Butterfly Conservation promote the conservation of a site containing no interesting butterflies? In effect with a multiplicity of order- or family-based entomological conservation groups is the advance of invertebrate conservation hindered?

#### REVIEW OF THE EXISTING STATUS OF INVERTEBRATE CONSERVATION IN THE UK

As one of the two current representatives for this society to the Joint Committee for the Conservation of British Invertebrates I considered that it was about time the society's membership was consulted for their views on the way invertebrate conservation is organized and promoted in this country. Personally I have been somewhat dissatisfied with the extent to which invertebrates and their special habitat needs are considered by the mainstream conservation organizations. The positive publicity which invertebrates other than butterflies receive in the natural history press appears to me to be absolutely minimal. But unlike most other species groups the lack of a specific membership organization representing the promotion of the conservation of all invertebrates seems to be the major omission. Birds have the RSPB, plants have Plantlife. Apart from JCCBI, which is after all only a committee, what do invertebrates have?

To look at the organization of invertebrate conservation I suggest we will need to examine the following points.

Have the existing bodies that work either directly or indirectly to secure and promote the conservation of invertebrate habitats and their appropriate management succeeded in this role?

Could or should the entomological community in the UK and Europe be better organized or focused in our conservation role? Can we afford to be complacent; can we assume that all the niches invertebrates inhabit will always be represented, at least somewhere in Europe.

#### *Existing bodies able to influence invertebrate conservation*

The existing bodies in this field in the UK are principally the statutory government bodies: English Nature, Countryside Council for Wales, Scottish Natural Heritage and the Joint Nature Conservation Committee. In the voluntary sector there is the JCCBI itself, the British Entomological and Natural History Society, the Amateur

Entomologists' Society, the Balfour-Browne Club (for water beetles), the British Dragonfly Society, Butterfly Conservation and lastly the Initiative for Scottish Insects. The county trusts network through the Royal Society for Nature Conservation are also relevant as are the National Trust and the World Wide Fund for Nature.

Are these bodies effective? I will comment briefly on their performance and propose some questions worth exploring on some of them.

You have heard about the JCCBI; may I remind you however that it is primarily an advisory and policy group and it is rarely able to do anything to defend specific sites. It does have a very valuable role though as a forum for airing views on legislation and other political issues likely to affect invertebrate conservation. I believe it is not as effective as it could be due inevitably to the fact that it lacks a firm financial foundation and as a consequence is not staffed on a full-time basis. If JCCBI is to continue more effectively in the future how can the funding problem be resolved?

I am not sure that the entomological community fully supports the JCCBI, or that they would feel it necessary to support any other type of organization that might be set up to promote invertebrate conservation. Perhaps entomologists are mainly lone workers, as many people have suggested to me, not feeling the need to co-ordinate their activities in the same way that the ornithologists have in recent years.

If we look at the statutory organizations, as they have only recently been completely reorganized by the government following the dismembering of the former Nature Conservancy Council, it is perhaps too early to say whether they will be as effective as the latter body appeared to be. The present plans to do without an entomologist in the headquarters of Scottish Natural Heritage do not bode well for the future though. To the outsider the old NCC achieved a lot as a unified body; certainly insect conservation appeared to be successfully promoted by some of the BENHS's own distinguished members employed by it. The "Research and Survey in Nature Conservation Series" reviews of different invertebrate groups are useful in synthesizing the requirements for habitat management of the invertebrate fauna. The one-day workshops arranged for staff of other nature conservation organizations to attempt to advise them on how to adopt the special management requirements of invertebrates are examples to us all of the sort of promotion work that needs to be done. I understand these events are being continued in England at least, by one of NCC's successor bodies, English Nature.

The designation of certain SSSI's has been considerably assisted following the receipt of knowledge about sites representing important invertebrate assemblages through the Invertebrate Site Register scheme. However I understand that not all the best sites for invertebrates will be designated SSSI, firstly because in some cases their vegetation features are not correspondingly as good. Secondly it is said to be more difficult to defend SSSI's designated purely on invertebrate interests only. If this is truly the situation is the JCCBI or the entomological community sufficiently well organized and do we hold sufficient data to be able to challenge this? I believe we do not.

The British Butterfly Conservation Society or Butterfly Conservation as it is now known, from its inception nearly 25 years ago, is arguably the most successful non-governmental insect conservation organization in this country. Of course it has obvious advantages; it is dealing with a small species group which are probably the most popular group of insects world-wide. Perhaps its members can be more active in a conservation sense, as they are mostly observers or other types of sympathizers to the cause of butterfly conservation. Thus as non-collectors they do not have to be involved with curation activities or concerned about taxonomic problems, leaving more time for active involvement in butterfly promotion and site management. The acquisition by Butterfly Conservation of its own reserves has also been a significant step forward.



Regarding the county wildlife trusts, how many of their in excess of 2000 reserves are devoted to invertebrate conservation you may ask? Our president writing nearly 20 years ago in an article entitled "Insect conservation and a county trust" (AES Conservation Group Bulletin 4, 1971), summarized the typical position of a county trust then, in this case the Gloucestershire Trust; none of its reserves were specifically devoted to insects. Its primary aim was to acquire at least one example of the major habitat types present in the county. Has this situation improved in the intervening period in better favour of invertebrates throughout the wildlife trusts' network?

The National Trust appears to me to have improved its record on invertebrate habitat management. Provided its management committees and land agents take notice of the entomological advisers to its Biological Survey team, it will be well placed to continue to assist the conservation of the invertebrate habitats in its ownership. Members should note a member of this team sits as an observer at the main JCCBI meetings.

#### *What improvements are needed in invertebrate conservation?*

The JCCBI does not appear to campaign for site retention; should it change or must we rely on the hope that the county wildlife trusts will by chance save sites holding important invertebrate assemblages? Could the JCCBI do more? For example should its future remit include advising landowners of nature conservation sites, on how to manage them appropriately for invertebrates? Are we as entomologists organized in such a way as to be able to influence the trusts and government organizations in the procurement of important invertebrate sites? Are these organizations maintaining the appropriate conditions on their existing reserves for the invertebrate inhabitants?

In a speech nearly 2 years ago (28 November 1990) the departing chairman of the Nature Conservancy Council, Sir William Wilkinson, highlighted the gradual decline in interest of SSSIs through lack of adequate management. A paper I have seen suggests that there is a high representation of nationally important invertebrates on National Nature Reserves and SSSIs. Have we voiced our concern that these special sites are managed appropriately for their invertebrate interest? While I have great respect for the abilities of the staff of the government nature conservation organizations, I believe we rely too much on them. Are they too constrained now by a government policy which does seem less than committed to the national series of SSSIs particularly since the break up of the old Nature Conservancy Council? At present, however, I have little confidence in the ability of entomologists as a group, as we are currently organized, outside of the government organizations, to have any influence in safeguarding the well-being of important invertebrate sites.

I believe there is considerable scope for us to have greater influence in the future over these matters provided we are organized in some way under a single umbrella group, but one that is not just a committee. Surely this would command more respect for entomologists if we could actively campaign for site retention and correct management as well. Certainly then we could not only give more support to the Government's invertebrate conservation advisers but also be a more influential force in non-governmental nature conservation. At present JCCBI appears often to just lend its name to other groups' campaigns. Should we in fact become a little more strident?

The setting up of a new organization would be a major undertaking, as the existing entomological societies often find it difficult to fill their functional voluntary positions. Reorganization of the JCCBI is probably the best option. Additionally in either case there would be major problems with funding. It is also important here, to make the

observation that if any of us wished to leave some wealth or land specifically to the invertebrate conservation cause, apart from butterflies, there is no organization to which such resources could be left in our wills. This should change.

There is one further important point I would like to make and that is that there is a growing anti-collecting sentiment in the wider world and perhaps particularly within Butterfly Conservation, RSPB, and in Europe in Germany influenced by extreme "Green" politics. There is a danger here, I believe, in that those groups who look down on the formation of natural history collections and even despise the modest insect collector are going to be seen as making all the running in invertebrate conservation initiatives. Entomologists or the main entomological organizations that fully acknowledge the need for specimen collection do need to become more involved in invertebrate habitat conservation.

It should also be borne in mind that it is more politically expedient to prohibit collecting and thus the collector than to act to save invertebrate habitats. And the collector is of course the main person able to feed back information about species declines.

### Conclusion

The platform of success of the Amateur Entomological Society's recent habitat conservation book (Fry, R. & Lonsdale, D., 1991, *Habitat conservation for insects—a neglected green issue*), and of the Royal Entomological Society's 15th symposium publication *The conservation of insects and their habitats* (Collins, N. M. & Thomas, J. A., eds) are the flagships on which an invertebrate conservation organization could go forward. These publications plus the invertebrate and insect "red data books" and the NCC's invertebrate species reviews reveal that we have a large amount of knowledge to make a start in seeking a higher profile for invertebrates and their habitats; it is time we invested more effort in such activities.

Our insect survey expertise can form the basis for the designation of SSSIs as in the recent case of Richmond Park being named in the press as one of the most important UK sites for beetles. Although the species survey is essential and one of the foundations of our interest I believe we need to combine it with more efforts in the public relations and political lobbying aspects of entomology which most of us appear to avoid. Perhaps there is an obvious reason for our lethargy which I am too naive to see, but if we don't take command of the situation it will be manipulated by others to the detriment of entomology.

In a paper given to the 3rd European Congress of Entomology in 1986 (Velthuis, H. W., ed.), the dipterist Martin Speight said, "the one group within Europe's population that might be expected to be promoting conservation of Europe's entomofauna is the entomologists. But do entomologists promote insect conservation?" he asked. It seems he was convinced they did not. For his next statements were to this effect.

"Among amateur entomologists in particular there is a tendency to use insects as an escape from the trials and tribulations of normal human existence, to practice as it were, zen through the art of entomology".

Although Martin's comments are perhaps slightly off-putting and extreme I think he is making an important point. He went on to say "if entomologists are *not* prepared to put time and effort into the promotion of insect conservation, they can hardly expect other people to do so".

Finally for those entomologists who are not already aware of it they should know that nature conservation was pioneered in this country by an insect collector, Charles Rothschild. He founded the Society for the Promotion of Nature Reserves in 1912, the forerunner of the Royal Society for Nature Conservation. It is ironic isn't it that

80 years later, of the major natural groups, invertebrate conservation could be said to be the least financially supported and organized in this country in a unified sense. However perhaps this discussion meeting will re-assure me that all is well and that I am being pessimistic—as usual, as Council would say.

#### DISCUSSION SESSION

Despite the range of points provided in the handout and in the preliminary papers, the meeting appeared to settle down to the consideration of seven major topics. These were: habitats; the county wildlife trusts and their reserves; the multiplicity of different entomological groups; the Joint Committee for the Conservation of British Invertebrates (JCCBI); Government agencies, SSSIs and information collection; SSSIs; and, finally, collecting.

##### *Habitats*

FRANCES MURPHY said achievement of balance in invertebrate conservation is difficult; the management of one group of invertebrates may be to the detriment of others. Habitat conservation is better than purely caring for individual species, thereby political lobbying for the retention of these habitats is essential.

STUART BALL indicated that in entomology there was still much work to be done on finding out where species occur. This was the great value of the Invertebrate Site Register scheme as information fed to the scheme, such as where the best invertebrate assemblages occurred, led to its use in assisting site management plans. He also felt that a single invertebrate conservation group promoting invertebrate habitats for conservation would not be effective. It was a far better approach to base reserves on habitat types and manage them to maintain the broad assemblage associated with that habitat. In future, he thought, emphasis should be placed on habitats not well represented in existing reserves.

##### *The county wildlife trusts and their reserves*

A disparate collection of views was expressed regarding invertebrate conservation and the county wildlife trusts as follows.

IAN FERGUSON cited the observation that most interesting insect species invariably seem to occur outside reserves.

MARTIN DRAKE mentioned that county wildlife trusts tend to purchase reserves of SSSI quality, often because they desired representative types of each major habitat type present in their county.

ROGER MORRIS stated that entomologists need to be on the boards of management of their local wildlife trusts and trust reserves to influence and advise in favour of sympathetic management for invertebrates.

DAVID LONSDALE mentioned that local entomologists are often active within their local wildlife trust but central groups, like JCCBI, don't hear of their activities, perhaps this represents a lack of coordination between entomologists.

##### *Multiplicity of different entomological groups*

Knowledge of what occurs on any one site needs to be shared.

STEVE BROOKS maintained that the British Dragonfly Society believe that they are good at achieving this and able to influence conservation landowners in the process,

despite being a small organization themselves. He felt that mass membership is not desirable within organizations as it can dilute the knowledgeable members and reduce influence. In this context he did not believe that Butterfly Conservation would become the main organizer of invertebrate conservation in the UK, because of their lack of specialists in the other orders.

STUART BALL felt that small active organizations like the Balfour-Browne Club were very effective.

STEPHEN MILES had asked during his address "Should there be a unified invertebrate group to promote invertebrate conservation?" If so he felt it must not duplicate what others were already doing. This approach was not felt by the conservation professionals from English Nature and the Joint Nature Conservation Committee, present at the meeting, to be likely to be effective. It was maintained that a "mega" invertebrate society would still not stop loss of sites. There are three general entomological societies in the UK. It was felt that there was no need for any others.

A major concern of the meeting was that Butterfly Conservation could take over as the main conservation organization for invertebrates, as it is keen to take on a wider role. The meeting felt that Butterfly Conservation would not be able to take on this responsibility. However the general opinion was that it might set the agenda for the issue of insect collecting. Butterfly Conservation is viewed as a large society of non-specialists, as is the RSPB, however that organization is also very successful.

The need for special interest groups organized by taxon was therefore justified as they can work with other larger groups, like the RSPB, and influence them. This should be the way forward.

JOHN MUGGLETON felt that more interest in the conservation of invertebrate assemblages needs to be shown by other entomological societies. Furthermore a specific society dedicated to promoting reserves for insect/invertebrate conservation alone might lead to more appropriate management for insects rather than other things.

### *Joint Committee for the Conservation of British Invertebrates (JCCBI)*

The view of some at the meeting was that this committee should promote itself and its products more, as it was not well-known. For instance many people had not heard of the "code for insect collecting" or the "code for insect re-establishment", both produced by the committee. However JCCBI's limitations in not being a society were a problem, it could not publish its own activities without its own funds. It was pointed out that it was up to individual societies who finance some of JCCBI's activities to publish the details of the committee's activities. But it was also recognized that most societies normally want to promote their own activities, not those of a third party, especially if promotion costs money.

DAVID LONSDALE said that the AES Conservation Committee feeds ideas to JCCBI. It had promoted various ideas in attempts to raise funding for the JCCBI because he considered that JCCBI should have a full-time conservation officer. He also recognized that JCCBI needed to move forward from discussion to action.

To be effective JCCBI needs to be able to act quickly, much more so than at present; its purpose, it was considered, should be to influence and educate people in the merits of invertebrate conservation. But it could not concern itself with sites or it would very quickly be bogged down in paperwork.



### *Government agencies, SSSIs and information collection*

IAN FERGUSON perceived that invertebrates were well down the list of priorities for these agencies. They act to announce SSSIs but the designation is then perceived as being ignored by the government. Countryside legislation is seen as excellent but can so often be overruled, even against the government's own expert advisers, the countryside agencies, English Nature etc.

Others felt that organizations like English Nature were "tied by the leg", unable to tell a landowner what to do positively. These organizations have limited budgets, their staff are not necessarily expert on every order, they need information to be channelled to them efficiently by entomologists through the wildlife trusts and local and national recording schemes.

ROGER MORRIS said there was a perception that many entomologists were not keen on sending information in to these organizations because they saw this whole process as a chore. What was the role of entomologists, were they collectors or surveyor/consultants? Were they interested in the wider issues of legislation and conservation?

PETER CHANDLER confirmed that he just wanted special sites to be still extant, not lost to development or other threats.

### *SSSIs*

Some members felt these should be based more on invertebrate assemblages rather than as traditionally they are perceived, just on plant communities.

In relation to landowners the SSSI system appeared coercive but "environmental sensitive areas" were seen more positively as co-operative systems. However the problem still remains that SSSI designations are largely ignored by government when it suits them. Habitat management of SSSIs was seen as a priority. Overall the SSSI system is seen very positively with many sites being successfully defended at public enquiries but MARTIN DRAKE inferred that one weakness was that designations cannot enforce appropriate management, they can only ban specified harmful practices.

### *Collecting*

Butterfly Conservation was perceived as having an anti-collecting attitude, which may be its worst attribute in the eyes of other entomologists. Collecting was seen as not absolutely necessary for butterflies but essential for the learning process of correct identification for all other groups. The case for collecting needs to be strongly and favourably stated by all entomologists, the meeting decided.

### *Conclusions*

Habitat management and conservation of broad assemblages of invertebrates, birds, animals and plants was seen as the focus, a holistic approach; it being considered as a trap for the unwary to concentrate on management just for a few single species of invertebrates. Specialist interest groups based on taxon were still desirable; overall the meeting appeared to conclude that there was no need for a single dominant invertebrate conservation group.

The British Entomological and Natural History Society was identified as having a future additional role: to promote invertebrate conservation more, perhaps through including more articles on this topic in its journal.